

PART F. PROPOSED MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

F.1 INTRODUCTION

Part F describes the mitigation monitoring process for the Proposed Project and the roles and responsibilities of government agencies in implementing and enforcing the selected measures.

This EIR/S includes provision for a Mitigation Monitoring Program for the mitigation measures proposed herein for the Alturas Transmission Line Project. The purpose of a Mitigation Monitoring Program is to ensure that measures adopted to mitigate or avoid significant impacts are actually implemented as intended. In addition, the Mitigation Monitoring Program would be used to ensure that measures incorporated as part of the Project Description to avoid or mitigate potential impacts (e.g., no placement of structures within river or stream beds) are realized in the final project design and construction.

To guide the Mitigation Monitoring Program, a Mitigation Monitoring, Compliance, and Reporting Plan (MMCRP) is defined herein. The California Public Utilities Commission (CPUC) and Bureau of Land Management (BLM), the State and Federal Lead Agencies for the project, respectively, and any monitors they may designate, would utilize the MMCRP as a working guide to monitor the implementation of mitigation measures by the Applicant, Sierra Pacific Power Company (SPPCo), and its contractors. Designated Lead Agency monitors would be present during all phases of project construction to ensure that the MMCRP is adhered to. The U.S. Forest Service (USFS) would also implement the MMCRP on National Forest System lands, including the Modoc and Toiyabe National Forests.

F.2 ORGANIZATION OF THE FINAL MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

In Part C (Environmental Analysis) of this EIR/S, mitigation measures were identified for each impact assessed. For each environmental issue area, a mitigation monitoring program that summarizes the requirements of each identified mitigation measure was developed and presented at the end of each section (C.2 to C.13). In addition, the mitigation monitoring programs are presented in their entirety in Section F.6. Many of the mitigation measures proposed in Part C require the preparation of a plan detailing the specific techniques to be utilized in mitigating identified impacts. In most cases, the objectives and guidelines for the plan are identified within the mitigation measure. However, in the case of the Community and Habitat Restoration Plan, the specific requirements of the plan are identified in Appendix E.3 (see Volume III).

If the Alturas Transmission Line Project is approved, an MMCRP would be adopted by the Lead Agencies (CPUC and BLM) to implement the mitigation monitoring program included in this EIR/S. The suggested outline for the MMCRP is presented below for the Proposed Project that reflects the mitigation measures identified in Part C. Subsequent to project approval, the Lead Agencies would finalize the MMCRP in consideration of additional information that may be received from affected jurisdictions, the Applicant, the public, and the agencies' mitigation monitoring experience.

**ALTURAS TRANSMISSION LINE PROJECT
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN**

General Outline

1. INTRODUCTION

- 1.1 Plan Overview [including Mitigation Monitoring Program Summary Table (from EIR/S, CEQA Findings, and ROD)]
- 1.2 Authority and Purpose of Plan/Agency Roles and Responsibilities
- 1.3 Plan Adoption

**2. PLAN OF DEVELOPMENT: PROJECT CONSTRUCTION, OPERATION,
AND MAINTENANCE**

[to be provided by SPPCo per CPUC/BLM requirements, and to include detailed photo alignment maps showing structure sites and construction details such as access routes, bladed and cleared areas, tree clearance plans, etc.]

3. PRE-CONSTRUCTION PLANS AND COMPLIANCE CRITERIA

- 3.1 Earth Resources:
 - Seismic and Geotechnical Studies/Design
 - Soil Conservation and Erosion Control Plan
 - Blasting Plan
- 3.2 Biological Resources:
 - Construction Access Field Surveys and Mitigation Plan
 - Stream Crossings and Wetlands Protection Plan
 - Community and Habitat Restoration Plan [summary, with reference to Appendix]
 - Wildlife Construction Disturbance Prevention Plan
 - Off-Site Habitat Compensation Plan
- 3.3 Cultural Resources:
 - Historic Properties Treatment Plan [summary, with reference to separately bound (and confidential) report]
 - Construction Monitoring Plan
- 3.4 Other Environmental Resources:
 - Fugitive Dust Control
 - Utilities Coordination
 - Landowner/Community Construction Notice and Coordination
 - Fire Prevention and Suppression Plan

- Transportation Management Plan
- Visual Impact Minimization

3.5 Resource Mapping and Construction Flagging

4. EDUCATION AND TRAINING

- 4.1 Monitoring and Agency Personnel
- 4.2 SPPCo and Construction Personnel

5. MITIGATION MONITORING PROGRAM ORGANIZATION AND MANAGEMENT

5.1 Program Organization

- Team Overview/Organizational Chart
- Specific Roles, Responsibilities, Qualifications, and Authorities of Team Members
[mitigation compliance, monitoring, enforcement, management, quality assurance]

5.2 Communication

5.3 Dispute Resolution

5.4 Scheduling and Resource Allocation and Control

6. MITIGATION MONITORING PROGRAM IMPLEMENTATION

- 6.1 Training and Start-Up Coordination [with reference to Section 4]
- 6.2 Monitoring Procedures
- 6.3 Documentation and Reporting
- 6.4 Contingency Plan for Changes or Corrective Action

APPENDIX

Community and Habitat Restoration Plan [including contingency plan for restoration failures to meet success criteria]

HISTORIC PROPERTIES TREATMENT PLAN [separately bound (and confidential) document]

F.3 ROLES AND RESPONSIBILITIES

This Section provides the recommended framework for the implementation of the MMCRP as it would be managed by each of the two Lead Agencies: the CPUC and BLM. The role of the Applicant is also described.

F.3.1 CALIFORNIA PUBLIC UTILITIES COMMISSION

The Public Utilities Code in numerous places confers authority upon the California Public Utilities Commission (CPUC) to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval be implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a Mitigation Monitoring Program when it approves a project that was subject to preparation of an EIR and where the EIR for the project identifies significant adverse environmental effects.

The purpose of a Mitigation Monitoring Program is to ensure that measures adopted to mitigate or avoid significant impacts are implemented. The CPUC views the Mitigation Monitoring, Compliance, and Reporting Plan (MMCRP) as a working guide to facilitate not only the implementation of mitigation measures by the project proponent, but also the monitoring, compliance and reporting activities of the CPUC and any monitors it may designate.

The Commission will address its responsibility under Public Resources Code Section 21081.6 when it takes action on the Alturas Transmission Line Project application. If the Commission approves the application, it will also adopt a final MMCRP which includes the mitigation measures ultimately made a condition of approval by the Commission.

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required mitigation measures are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this mitigation monitoring program and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to the level identified in the program.

Because of the geographic extent of the Proposed Project, the CPUC may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as deemed necessary, and some monitoring responsibilities may be assumed by responsible or trustee state and federal agencies. The CPUC will assign at least one environmental monitor to each construction site to coordinate implementation of the MMCRP for the designated area. The CPUC or its designee(s), however, will ensure that the person delegated any duties or responsibilities is qualified to monitor compliance.

Any Request For Qualifications (RFQ) or contract associated with the Commission's independent environmental monitor(s), shall contain a provision clearly stating that the terms and conditions of the RFP or contract do not reduce, in any way, the scope of the mitigation monitoring program, the requirements set forth therein, or the authority of the Commission or its environmental monitor, as described in the MMCRP adopted by the Commission.

Any mitigation measure study or plan that requires the approval of the CPUC must allow at least 60 days for adequate review time. When a mitigation measure requires that a mitigation study or plan be developed during the design phase of the project, the Applicant must submit the final documents to CPUC for review and approval for at least 60 days before construction begins. Other agencies and jurisdictions may require additional review time. It is the responsibility of the environmental monitor(s) to insure that appropriate agency reviews and approvals are obtained.

The CPUC or its designee will also ensure that any deviation from the procedures identified under the MMCRP is approved by the CPUC. Any deviation and its correction shall be reported immediately to the CPUC or its designee by the environmental monitor assigned to the construction spread.

F.3.2 BUREAU OF LAND MANAGEMENT AND U.S. FOREST SERVICE

As the Federal Lead Agency for the Proposed Project under NEPA, the BLM will be responsible for monitoring the performance and effectiveness of mitigation measures on BLM land. Similarly, the USFS will be responsible for MMCRP implementation and monitoring on the Modoc and Toiyabe National Forests. Where the Proposed Project crosses land outside of the jurisdiction of the BLM, the BLM recommends the mitigation measures included in this EIR/S for the consideration of the cooperating and responsible agencies with the authority to adopt them. In the Record of Decision (ROD) based on the Final EIR/S, the BLM Eagle Lake Area Manager (the Authorized Officer) will adopt the mitigation measures appropriate to the BLM portion of the Right-of-Way (ROW). The measures would then be monitored and enforced by the BLM as part of normal permit administration.

F.3.3 SIERRA PACIFIC POWER COMPANY

The Applicant, SPPCo, will be responsible for successfully implementing all the mitigation measures identified in the MMCRP. For each issue area in Part C (Environmental Analysis), detailed significance criteria are presented that establish a minimum threshold for successful mitigation. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Other mitigation measures include detailed success criteria. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process, and through the review and approval of specific programs for the implementation of mitigation measures.

F.4 GENERAL MONITORING PROCEDURES

F.4.1 ENVIRONMENTAL MONITOR

The majority of the monitoring procedures would be conducted during the construction phase of the project. The CPUC/BLM and the Lead Agency-designated environmental monitor(s) are responsible for integrating the mitigation monitoring procedures into the construction process, in coordination with SPPCo. To oversee the monitoring procedures and to ensure success, the environmental monitor assigned to each construction site must be onsite during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The environmental monitor is responsible for ensuring that all procedures specified in the MMCRP are followed. The environmental monitor will have the authority, as designated by the Lead Agencies, to terminate construction activities if required mitigation is not being strictly adhered to.

The environmental monitor shall inform the CPUC and BLM, in writing, of any mitigation measures that are not or cannot be successfully implemented with respect to the success criteria for each issue area. The CPUC/BLM, or their designee, will assess whether alternative mitigation is appropriate and specify to SPPCo and its contractors the subsequent actions required.

F.4.2 CONSTRUCTION PERSONNEL

A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in the Final MMCRP, will be taken:

- Procedures to be followed by construction companies hired to do the work will be written into contracts between SPPCo and the construction companies. Procedures to be followed by construction crews will be written into a separate agreement that all construction personnel will be asked to sign, denoting agreement.
- One or more preconstruction meetings will be held to inform and train all construction personnel about the requirements of the monitoring program (as detailed in the MMCRP).
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures requiring their attention.

F.4.3 GENERAL REPORTING PROCEDURES

Site visits and specified monitoring procedures performed by other individuals will be reported to the environmental monitor assigned to the relevant construction spread. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the environmental monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The environmental monitor will note any problems that may occur and take appropriate action to rectify the

problems. The Applicant shall provide the CPUC/BLM with regular written reports of the project, as specified in the Final MMCRP, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project.

F.4.4 ENFORCEMENT RESPONSIBILITY

The CPUC is responsible for enforcing the procedures adopted for monitoring through the environmental monitor assigned to each construction spread. The environmental monitor shall note any problems with mitigation implementation notify appropriate agencies or individuals about any problems, and report the problems to the CPUC or its designee.

The CPUC has the authority to halt any construction, operation, or maintenance activity associated with the Alturas Transmission Line Project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The CPUC may assign this authority to the environmental monitor for each construction spread. The BLM, USFS, and Sierra Army Depot (SIAD) have the authority to halt any construction, operation, or maintenance activity associated with the Alturas Transmission Line Project on Federal lands under their respective jurisdictions, if such activity is determined to be a deviation from the terms of the right-of-way grant or other use authorization on Federal lands.

F.4.5 DISPUTE RESOLUTION

It is expected that the Final MMCRP will reduce or eliminate many potential disputes. However, even with the best preparation, disputes may occur. If the Commission approves the application, it will delegate the responsibility for supervision of the Mitigation Monitoring Program to the Commission Advisory and Compliance Division (CACD). Should any disputes or complaints regarding the implementation of evaluation of the Program or mitigation measures arise, they should be directed first to CACD's Project Manager for resolution. CACD's Project Manager will attempt to initiate enforcement or compliance action to address deviations from the Proposed Project or adopted Mitigation Monitoring Program.

If a dispute or complaint regarding the implementation or evaluation of the Program or the mitigation measures cannot be resolved informally or through enforcement or compliance action by CACD's Project Manager, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on the other affected participants in the dispute. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and the other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.

Parties may also seek review through the existing complaint procedures specified in the Commission's Rules of Practice and Procedure, although a good faith effort should first be made to use the foregoing procedure.

Disputes regarding Federal use authorizations on Federal lands will be resolved according to the established compliance and enforcement procedures of the BLM, USFS, or SIAD, as appropriate.

F.4.6 CONDITION EFFECTIVENESS REVIEW

In order to fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a mitigation monitoring program to ensure compliance during project implementation (CEQA § 21081.6), the Commission may, on its own motion, institute a separate investigation or proceeding to review the project conditions of approval. This separate review would be conducted in a manner consistent with the Commission's Rules of Practices and Procedure.

F.4.7 PUBLIC ACCESS TO RECORDS

The public is allowed access to records and reports used to track the Mitigation Monitoring Program. Monitoring records and reports will be made available for public inspection by the CPUC/BLM or its designee on request.

F.5 SEASONAL CONSTRUCTION LIMITATIONS

Table C.3-14 in Section C.3, Biological Resources, summarizes time periods during which construction would be prohibited due to vulnerable life stages of species of concern (e.g., breeding, wintering, nesting), or during which times biological surveys would have to be carried out to determine the presence of various sensitive species that would have to be avoided. These time periods are delineated in mitigation measures in this document.

F.6 MITIGATION MONITORING PROGRAMS

The following table incorporates the mitigation monitoring programs presented at the end of each issue area in Part C. The programs are compiled here so that a separate and complete document is available to agencies and monitors.

MITIGATION MONITORING PROGRAM: ALL ISSUE AREAS

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/ Reporting Action	Effectiveness Criteria	Timing
AIR QUALITY						
Particulate emissions from construction activity (Class II)	<p>A-1 Submit a Construction, Operation, and Maintenance Plan, detailing measures (A-2 through A-4) to mitigate potential impacts. Describe the construction boundaries (staging areas, ROW, substation), schedule for watering and water transportation and storage.</p> <p>A-2 Reduce particulate emissions (dust) by applying water to disturbed construction areas until the soil coatings or other approved dust control measures are applied. Cover stockpiled soil; cover soil loads while in transit.</p> <p>A-3 Increase dust control watering when wind speeds exceed 15 miles per hour, depending upon the soil moisture content.</p> <p>A-4 Confine construction activities to specified areas within the ROW, substation sites, staging areas, and designated access routes.</p>	All Proposed and Alternative Segments	BLM CPUC APCDs USFS	Review and approve Construction, Operation and Maintenance Plan; monitor construction activity for compliance with Plan.	Compliance with Plan	Plan approved prior to permit issuance; monitor activities during construction

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
BIOLOGICAL RESOURCES: VEGETATION						
Temporary and permanent loss of plant communities (Class II)	<p>B-1 Flag allowable travel routes and construction areas to avoid surface removal of significant plant communities; where not avoided, use restoration and offsite compensation per Community and Habitat Restoration Plan (with Contingency Plan) and Offsite Compensation Plan to be prepared by SPPCo under the supervision of responsible agencies.</p> <p>B-2 Avoid surface removal of volcanic vertisol plant communities; flag allowable travel routes and construction areas to avoid; cease activities if ruts form greater than 6" deep for more than 100 feet in vertisol soils; cease activities if ruts form greater than 3" deep for more than 100 feet on all other soils.</p>	<p>Proposed Segments A,C,E, K,L,N,Q,R,T,W,X,Y,Z; Devils Garden and Border Town Substations</p> <p>Alternative Segments D,G, J,ESVA,M,P,S,U,Z, WCFG,X-East</p>	BLM CPUC CDFG USACE USFS	Monitor identification of allowable travel routes and construction areas based on avoidance of sensitive resources, prior to construction; monitor construction. After construction, verify where restoration is required. Monitor revegetation effectiveness for 5 years; activate Contingency Plan requiring additional offsite compensation in case of failure to meet success criteria.	Compliance with avoidance zone; achievement of annual criteria for revegetation effectiveness in terms of coverage, species composition, and viability in comparison with reference plots; compensation land transfer completed.	Plans in place 60 days before and allowable travel and construction areas flagged before construction; avoidance during construction; evaluate avoidance and conduct restoration after construction; effectiveness monitoring for 5 years after construction.
Temporary and permanent loss of special status plants and habitats (Class II)	B-3 Avoid special status species if possible; flag allowable travel routes and construction areas prior to construction; if not avoided, use restoration and offsite compensation, per restoration and compensation plans.	<p>Proposed Segments C,E,K, and L</p> <p>Alternative Segments D,J, and ESVA</p>	BLM CPUC CDFG USACE USFS	See B-1 and B-2 above	See B-1 and B-2 above	See B-1 and B-2 above
Overland travel disturbing plant communities (Class II)	B-4 Reduce surface impacts on plant communities by using avoidance, restoration, and offsite compensation or enhancement, per restoration and compensation plans.	All Proposed and Alternative Segments	BLM CPUC CDFG USACE USFS	See B-1 and B-2 above	See B-1 and B-2 above	See B-1 and B-2 above
Overland travel disturbing special status plants and habitats (Class II)	B-5 Reduce surface impacts on plant communities by using avoidance, restoration, and offsite compensation or enhancement.	<p>Proposed Segments A,E,K, L, and Q</p> <p>Alternative Segments B,D, F,I,J,M,P</p>	BLM CPUC CDFG USFS	See B-1 and B-2 above	See B-1 and B-2 above	See B-1 and B-2 above

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Increased access to sensitive vegetation resources (Class II)	B-6 Replace existing barriers to overland travel following blading and place new barriers at access points to non-bladed overland travel routes.	All Segments except Proposed Segment R and Alternative Segments H and U	BLM CPUC CDFG USFS USFWS	Replace or enhance existing barriers to overland travel and restore new or upgraded roads to pre-existing conditions. Monitor mitigation to evaluate success or failure. Contingency plan in case of failure to meet success criteria.	Access not used for one year after construction.	Place barriers after construction; monitor after construction to evaluate success
Erosion and sedimentation (Class II)	B-7 Implement Soil Conservation and Erosion Control Plan (Mitigation Measure G-11).	All Proposed and Alternative Segments except Alternative Segments H and I	BLM CPUC CDFG RWQCB USACE USFS	Review and approve Plan for application to biological resources. Monitor compliance and trigger contingency plan as appropriate.	See Mitigation Measure G-11; no adverse effects on vegetation, wetlands, or riparian areas.	See G-11 below
Introduction of non-native plant species (Class II)	B-8 Implement Noxious Weed Control Plan, flag existing weed populations, and control equipment and materials transported to the project corridor during and after construction.	All Proposed and Alternative Segments	BLM CPUC CDFG USFS	Plan review/approval; monitor flagging and construction/revegetation; post-construction success evaluation/trigger of remedial action	Seeds and straw to be certified weed-free by CDFA; fill materials to pass County Agriculture Commissioner certification	Plans in place 60 days before construction; monitor effectiveness during and after construction.
BIOLOGICAL RESOURCES: WILDLIFE						
Loss of mule deer winter, holding, and migration habitat (Class II)	B-9 Restoration/reclamation to include forbs and shrubs appropriate for each habitat type and offsite compensation per Mitigation Measure B-1.	Proposed Segments A,C,E, K,L,N,O,Q,R,W Alternative Segments F,G, H,I,J,M,P	BLM CPUC CDFG USFS	See B-1 and B-2 above	See B-1 and B-2 above	See B-1 and B-2 above
Loss of pronghorn winter, migration, and kidding habitat (Class II)	B-10 Same as for B-9, with restoration to include browse and other species preferred by pronghorn.	Proposed Segments A,C,E, K,L,N Alternative Segments B,D, G,J	BLM CPUC CDFG USFS	See B-1 and B-2 above	See B-1 and B-2 above	See B-1 and B-2 above
Loss of sage grouse brood habitat (Class II)	B-11 Same as for B-9, with restoration of sage and forbs required by young grouse.	Proposed Segments A,C,E, K,L,N Alternative Segments F,G, H,I,J,ESVA	BLM CPUC CDFG USFWS USFS	See B-1 and B-2 above	See B-1 and B-2 above	See B-1 and B-2 above
Loss of pygmy rabbit habitat (Class II)	B-12 Flag allowable construction areas and use existing roads whenever possible; remove pygmy rabbits where avoidance is not possible.	Proposed Segments L,N, O,Q Alternative Segments ESVA,M,P	BLM CPUC CDFG USFWS USFS	Monitor identification of allowable construction areas and removal of rabbits prior to construction.	No mortalities. No rabbits crushed in burrows.	Flag allowable construction areas before construction and ensure avoidance during construction

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Overland travel disturbing big game habitat (Class II)	B-13 Monitor natural recovery and locate areas where restoration may be needed. Offsite compensation for failed recovery.	Proposed Segments A,C,E, K,L,O,Q,R,W Alternative Segments B,F, G,J,ESVA,M,P	BLM CPUC CDFG USFS	Prepare plan for mitigation and monitoring during and after construction. Monitor to evaluate recovery. Require offsite compensation where remedial actions are necessary.	Meet success criteria for natural recovery of habitat, or for offsite compensation where needed.	Prepare plan before permit issuance; during and after construction, monitor and identify areas needing remedial action for 5 years
Disturbance to special status species and habitats, including special status bats, pygmy rabbits, raptor nest sites, and sage grouse lek locations (Class II)	B-14 Flag allowable travel areas to avoid habitat per species-specific buffers and seasonal avoidance periods; utilize biological monitor during construction. B-15 Overland travel to be limited to areas identified in biological monitoring plan. Riparian and perennial stream habitats to be avoided.	Sensitive sites located on all Proposed and Alternative Segments	BLM CPUC CDFG USFWS USFS	Flag allowable travel areas and monitor construction to ensure no overland travel occurs outside these areas.	No disturbance to sensitive areas.	Flag allowable travel areas before construction and ensure avoidance of outside areas during construction
Direct mortality of individual animals (Class II)	B-16 Construction specifications to include speed limits, firearms and pet restrictions, and litter removal program. Include construction worker training.	All Proposed and Alternative Segments, substations, access roads, staging areas	BLM CPUC CDFG USFS	Prepare Wildlife Construction Disturbance Prevention Plan. Prepare crew education materials. Conduct pre-field "tailgate" sessions. Prepare monitoring report.	Compliance with construction specifications. No observations of mortality or evidence collected by biological monitor.	Prepare plan and provide education before construction; monitor during construction
Indirect impacts to wildlife due to increased human presence (Class II)	B-17 Construction to be scheduled to avoid critical seasons and establish buffer distances for sensitive areas. See B-14 and B-15 above	All Sensitive sites on all Proposed and Alternative Segments	BLM CPUC CDFG USFS	Construction monitoring to verify that avoidance requirements are met.	Compliance with construction specifications. No observations of distressed wildlife by biological monitor	Prepare location lists before construction; monitor during construction
Indirect impacts to wildlife due to increased access to remote habitat (Class II)	B-18 Improved roads to be returned to preconstruction condition. Existing barriers to be replaced. See also B-6 above.	All segments with improved or new access roads	BLM CPUC CDFG USFS	Mitigation monitoring for 5 years to evaluate success of mitigation measure. Contingency plan in case of failure to meet success criteria. Require additional offsite compensation in case of failure to meet success criteria.	Compliance with construction specifications. Achievement of habitat recovery.	Block roads and monitor effectiveness after construction

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Impact	Mitigation Measures	Location (Segment)	Responsible Agency[†]	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Bird electrocution at substation locations (Class II)	B-19 Substation design to eliminate attraction of perching and roosting and to minimize electrocution hazard.	All Proposed and Alternative substation locations	BLM CPUC CDFG USFWS USFS	Review/approve designs. Conduct monitoring program for 5 years after construction is complete to document and evaluate avoidance. Require additional offsite compensation in case of failure to meet success criteria.	No increase in bird electrocutions.	Monitor after construction - two surveys per year, plus contact with maintenance staff.
Potential bird collisions with transmission lines (Class II)	B-20 Mark powerlines with bird flight diverters.	Proposed Segments A,C,E, K,O,Q,T,W,X	BLM CPUC CDFG USFWS USFS	As required by USFWS, conduct lifetime monitoring program during critical periods. Annual report to be provided. Require additional offsite compensation in case of failure to meet success criteria.	No increase in bird collision mortality.	Monitor 3 times per year (approximately on Nov. 1, Apr. 15, and June 15) after construction for lifetime.
	B-21 Use Rock Creek modification to Proposed Segment A.	Alternative Segments B,F, G,I,ESVA,S,U,X-East				
	B-22 With application of B-20, off-site compensation would be required to reduce residual impacts to level that is not significant for greater sandhill cranes.			Monitoring of offsite habitat acquired to determine nesting success. Evaluate effectiveness after 5 years of monitoring. Require additional offsite compensation in case of failure to meet success criteria.	Confirmation of one nest success in a 5-year period.	Monitor for 5 years after construction - Annual 5-day survey during month of April to assess nest success and photo-document habitat condition.
Increased perching opportunities for raptors and ravens and displacement of sage grouse	B-23 Install perch deterrents on structures located within 2-mile radius of sage grouse leks and in vicinity of waterfowl nesting habitat.	Proposed Segments A,C,E,K,L,N,O Alternative Segments B,D, F,G,H,I,J,ESVA,P	BLM CPUC CDFG USFWS USFS	Conduct 2-year post-construction surveys to document and evaluate success of measure.	No significant increase in predation of upland game birds. No more than 5 observations of raptors perching on transmission line structures annually.	Monitor after construction - during winter season when raptor population is high.
	B-24 Prepare and implement Habitat Enhancement Plan for sage grouse habitat.	Proposed Segments C,E,K, L,N	BLM CPUC CDFG	Review/approve Habitat Enhancement Plan. Monitor enhanced areas for 5 years. Require additional offsite compensation in case of failure to meet success criteria.	Use of enhanced areas by grouse	Plan in place 60 days prior to construction; monitor after construction during post-breeding season (May)

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
CULTURAL RESOURCES						
Construction activities disturbing or removing surface or subsurface significant/unevaluated cultural resource sites (Class II)	C-1 Avoid all significant/unevaluated cultural resource sites by flagging/monitoring.	Proposed Segments A,C,E, K,L,O,Q,W Alternative Segments B,D, G,J,ESVA,M,P,S,Z,WCFG	BLM CPUC SHPO USFS	Prepare monitoring and Historic Properties Treatment Plan, flag sensitive areas for avoidance, monitor construction activities, prepare monitoring report. Conduct post-construction survey and documentation to evaluate success of avoidance.	Avoidance of all significant/unevaluated cultural resource sites.	Following agency review/approval of reports: Flag sites before construction; monitor construction; survey after construction
	C-2 Sites recommended as eligible to NRHP, or unevaluated sites, will be treated as significant cultural sites. In the event 100% avoidance is not possible, the Applicant through the provisions of BLM's Programmatic Agreement will implement site-specific steps necessary to reduce or eliminate adverse effects to historic property.			Prepare treatment plan and/or implement procedures set forth in PA. Conduct evaluations/data recovery/research as required. Report results to Lead Agency(s).	Upon conclusion of evaluations, data recovery/research program exhausts potential of site to yield further important information.	Complete Programmatic Agreement before construction; implement following agency review/approval of treatment plans
Construction, operation, maintenance or public use disturbing significant or unevaluated cultural resource sites (Class II)	C-1 and C-2, above C-3 Restrict vegetation management activities in sensitive areas to pedestrian access only. Avoid sensitive cultural resource locations during maintenance activities requiring overland travel.	Proposed Segments A,C,E, K,L,O,Q,W Alternative Segments B,D, G,J,ESVA,M,P,S,Z,WCFG	BLM CPUC SHPO USFS	Prepare monitoring and treatment plan, flag sensitive areas for avoidance, monitor construction activities, prepare monitoring report.	Post-construction and maintenance surveys, document success of avoidance.	Prepare maintenance plan after construction; survey after construction and during maintenance
Unauthorized collection and/or vandalism of significant or unevaluated cultural resource sites (Class II).	C-4 Prior to construction, inform crews of cultural resource values/regulatory protections and required procedures regarding avoidance of sensitive cultural resources.	Proposed Segments A,C,E, K,L,O,Q,W, Alternative Segments B,D, G,J,ESVA,M,P,S,Z,WCFG	BLM CPUC USFS	Prepare monitoring plan. Prepare crew education materials. Conduct pre-field "tailgate" sessions. Prepare monitoring report. Conduct post-construction surveys to evaluate effectiveness of mitigation.	Post-construction surveys of sensitive areas, document success of measures.	Prepare plan and educate crew before construction; survey after construction
	C-5 Post-construction: block public access to all new or improved access roads.			Conduct post-construction inspection of blocked roads.	Post-construction surveys of blocked roads, document success of measure.	Block roads after construction
Disturbance to context, setting, feeling, or association of cultural resource sites (Class I or II)	C-1 and C-2, above. C-6 Place permanent facilities as far as possible from significant cultural resource sites.	Proposed Segments K,O Alternative Segments ESVA,S	BLM CPUC SHPO	Agency/SHPO may require project modification to further mitigate impacts.	Project modifications result in no adverse effect to context, setting, feeling, or association.	Prior to final project design

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
	C-7 Acquire land and develop interpretive trail at Infernal Caverns Battlefield area.	Segment C (Infernal Caverns Battlefield area)	BLM CPUC SHPO	BLM develops plan for land exchange/interpretive trail in concert with Applicant. EA prepared by BLM prior to implementation. Conduct post-implementation evaluation of trail.	Minimal intrusion on setting and context.	Complete plans prior to construction of project
ENERGY AND UTILITIES						
Conflict with buried utilities (Class II)	U-1 The Applicant shall submit final construction plans to all affected utilities for their review and shall obtain written approval 30-days prior to the commencement of construction. In addition, the Applicant/contractor shall provide 72-hour written notice to all utility owners whenever construction activities are scheduled within 100 yards of an existing utility. P-2 , below.	All Proposed and Alternative Segments	BLM CPUC USFS	Inspect documentation of coordination with affected utilities and confirm that all conditions have been met prior to construction.	No disruption of a utility service during or after construction	Provide notice 30 days prior to construction
Restricted access for utility emergency response units (Class III)	T-5 , below.					
Cumulative impacts of simultaneous construction projects. (Class II)	T-13 , below.					
GEOLOGY, SOILS, AND PALEONTOLOGY						
Disturbed ground or unique geologic formations (Class III)	G-1 Regrade and recontour disturbed areas. Avoid unique geologic formations.	All Proposed and Alternative Segments	BLM CPUC CDFG CDMG NBMG USACE USFS	Review plans; inspect route during construction	Compliance with approved plans; construction monitored; disturbed ground regraded and/or recontoured to minimize residual affects	During construction

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Fault displacement collapsing transmission line structures or substation (Class II)	<p>G-2 Avoid placement of structures within active fault zone.</p> <p>G-3 Avoid placement of structures within potentially active fault zones, where possible.</p> <p>G-4 Conduct geological and/or geotechnical studies to determine amount of fault displacement; design transmission line to withstand expected maximum fault displacement.</p>	<p>Proposed Segments A,C,E, L,N,O,Q,X</p> <p>Alternative Segments D,J, M,P,S,U,Z,WCFG</p>	BLM CPUC CDMG Counties NBMG USFS	Review alignment plans to ensure avoidance; review geologic and geotechnical studies; review as-built maps	Active and potentially active faults are identified on maps of project alignment; no structures to be located in fault zones. Fault displacement are quantified; design is adequate to resist collapse during expected events. Permits issued; post-construction verification.	Review Plans before permit issuance; inspect after construction
Strong ground shaking collapsing transmission line structures or substation facilities (Class II)	<p>G-5 Conduct geotechnical study to determine seismic criteria for designing structures to withstand strong ground shaking.</p> <p>G-6 Determine and apply earthquake-resistant design.</p>	All Proposed and Alternative Segments	BLM CPUC CDMG NBMG USFS	<p>1) Review and approve plans</p> <p>2) Review as-built plans to ensure design was implemented</p>	Compliance with approved plans; facilities built with adequate safety factor to resist damage during large earthquakes.	<p>1) Prior to permit issuance (G-5) or construction (G-6)</p> <p>2) After construction</p>
Landslides/slope instability damaging structures (Class II)	<p>G-7 Perform engineering geological and/or geotechnical investigations for structures on slopes within known landslide areas.</p> <p>G-8 Develop blasting plan to avoid causing landslides or rock falls.</p>	<p>Proposed Segments C,E,L, N,Q,R,T,W,X</p> <p>Alternative Segments B,D, J,M,P,X-East</p>	BLM CPUC County Building & Safety NBMG	Review investigation report and approve geologist/engineer's recommendations. Review and approve blasting plan. Monitor construction.	Potentially unstable slopes identified and recommendation for corrective action complied with	Perform studies and prepare plans prior to construction.
Loss of or reduced accessibility to mineral resources (Class II)	G-9 In siting structures and ROW access roads, avoid existing and planned mineral extraction sites and access routes.	<p>Proposed Segments R,T,W, X, and Border Town Substation</p> <p>Alternative Segments M,S, U,WCFG, and Alternative Border Town Substation (SPPCo Site)</p>	BLM CPUC CDMG	Review plans for placement of structures and substations	No structures or substations located on or preventing access to mine roads or known reserves	Prior to permit issuance
Ash fall from major volcanic eruption in region (Class II)	G-10 Develop Emergency Preparedness Plan to identify project components at risk, and develop procedures to minimize impacts.	All Proposed and Alternative Segments	BLM CPUC Counties FEMA NBMG USFS	Review plan	Compliance with approved plan that describes measures to be undertaken during an ash fall.	Prior to permit issuance

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Construction resulting in grading and ground disturbance and erosion (Class II)	G-11 Applicant shall prepare Soil Conservation and Erosion Control Plan; minimize new grading and road upgrading; use special equipment; revegetate.	All Proposed and Alternative Segments	BLM CPUC USFS	Review plan, monitor construction	Compliance with approved plan. Graded areas protected from erosion, special equipment used where appropriate, drainage across construction sites controlled, disturbed areas revegetated, no construction during wet periods, no deep tire ruts, stream crossings minimized and banks protected.	Prior to permit issuance
Loss of agricultural lands (Class III)	G-12 Negotiate with landowners and compensate for loss or reduction of agricultural land	Proposed Segments A,E,K, O,W,X Alternative Segments B,F, G,H,I	CPUC	Review negotiated agreements	Agreements mutually agreed upon	Complete negotiations prior to construction
Steel or concrete corrosion resulting from corrosive soils (Class II)	G-13 Test soils for corrosion potential; design to prevent corrosion where potential is high.	Proposed and Alternative Segments A,C,E,K,L,N,O, Q,T,W Alternative Segments D,F, G,H,I,J,M,P,S,X-East	BLM CPUC Counties USFS	Review plans	Compliance with approved plan; structures designed to resist corrosion	Complete testing and design prior to construction
Damage to project from expansive soils (Class II)	G-14 Test soils for shrink-swell potential; design facilities to withstand expansivity.	Proposed Segments A,E,K, L,O,Q,R,T,X Alternative Segments D,F, G,H,I,J,M,X-East	BLM CPUC Counties USFS	Review plans and geotechnical reports	Compliance with recommendations of geotechnical report; facilities designed and built to withstand expansive soils	Complete testing and design prior to permit issuance
Loss, destruction, or alteration of paleontological resources (Class II)	G-15 Develop paleontologic data inventory and sampling plan; inspect drill cuttings and excavations.	Proposed Segments A,C,L, M,O,Q,R,T,W Alternative Segments J,P, Border Town Alternative Substation (SPPCo Site)	BLM CPUC CDMG NBMG USFS	Review plans; inspect excavations; develop site-specific measures if fossils are found	Compliance with approved plan; fossils catalogued and/or collected and placed in repositories	Develop plan prior to construction; implement during construction

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
HYDROLOGY						
Scour and erosion of stream beds (Class II)	G-11 , above H-1 Prepare Stream Crossing and Wetlands Protection Plan. H-2 Maximize distance of ROW from waterways.	Proposed Segments A,C,L,N,Q,R,T,W,X Alternative Segments B,D,M,P,S,U,Z,WCFG, Border Town Alternative Substation (SPPCo Site)	BLM CPUC CDFG CDWR USFS	Review Construction, Operation and Maintenance Plan; monitor construction	Compliance with approved plan. No extensive alteration of stream channels; erosion is minimal; stream banks are protected during construction and catch basins are in place where necessary	Design stream crossings prior to permit issuance; inspect during construction
Flooding of construction activities at stream crossings; flood damage to structures (Class II)	H-3 Construction to occur only during low flow periods. H-4 Permanent structures and facilities shall be located outside of stream and river beds. Structures located in floodplains shall be designed based on site-specific analyses.	Proposed Segments A,K,L,O,Q Alternative Segments B,F,G,H,I,P,S,WCFG	BLM CPUC CDFG CDWR USFS	Review Construction, Operation and Maintenance Plan; monitor construction	Compliance with approved plan. No construction during floods. Structures designed and built to resist damage during floods	Design facilities prior to permit issuance; inspect during construction
Accidental contamination of surface waters and ground water (Class II)	H-5 Perform refueling away from streams. H-6 Develop Best Management Practices; clean up spills; obtain 404 and storm water permits.	All Proposed and Alternative Segments	BLM CPUC CDFG CWRCB RWQCB USACE USFS	Review plans; monitor construction	Compliance with Best Management Practices. Permits issued; inspections show no significant impacts. No hazardous spills near stream channels or accidental spills effectively cleaned up	During construction Prior to permit issuance
Ground water flow affected by construction, drilling, or blasting (Class II)	G-8 and H-1 , above H-7 Avoid locating structures in wetlands; avoid travel in wetlands; construct during dry seasons. Develop procedures for construction in wetland areas. H-8 Avoid blasting; if necessary, prepare a Blasting Plan for each site.	Proposed Segments A,W,X Alternative Segments B,D,F,G,H,I,ESVA,P,U,WCFG Proposed Segments A,C,E,K,L,Q Alternative Segments D,J,P	BLM CPUC CDFG CDWR RWQCB USACE USFS	Review construction plans; monitor construction; review blasting plan	Compliance with approved plans and procedures; no change in ground water flow; no permanent disturbance of wetlands; no deep cuts	Determine structure locations and prepare plans & procedures prior to permit issuance; monitor during construction

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/ Reporting Action	Effectiveness Criteria	Timing
LAND USE, RECREATION, RELIGIOUS USES						
Disturbances to residential uses during project construction (Class III)	L-1 Provide advance notice of construction to property owners, residents, and tenants within 1000 feet of the 160-foot ROW, substation site, or access road.	All Proposed and Alternative Segments	BLM CPUC	Review and approve the Construction, Operation, and Maintenance Plan. Review and approve copies of mailed notices, bulletins, and published notices.	Timely and detailed notices, bulletins, and published notices. Less than 25 percent of affected property owners, residents, and tenants contact Applicant or other affected agencies to complain about construction disturbances.	At least one month before project construction in residential areas
Disturbances to residential uses during project construction (Class III)	L-2 Appoint a public affairs officer to be the point of contact to discuss public concerns or questions. See also Mitigation Measures A-3, U-1, N-3, T-1 through T-4, and V-1 through V-3.	All Proposed and Alternative Segments	BLM CPUC	Review memorandum regarding appointment of specific individual as public affairs officer. Review and approve copies of mailed notices, bulletins, and published notices.	Less than 25 percent of the individuals that contact the Applicant indicate that they were not aware of the existence of the public affairs officer, or complain that the public affairs officer did not adequately respond to their concerns.	Appoint officer prior to construction notification; monitor performance during and after construction
Disturbances to recreational uses during construction (Class III)	L-3 Provide advance notice of restricting, blocking, or detouring of access routes to known recreational areas or destinations. See also Mitigation Measure T-5.	Proposed Segments A,C,E,K,L,O,Q,T,W Alternative Segments B,D,F,G,J,P,Z	BLM CPUC USFS	Review and approve the Construction, Operation, and Maintenance Plan. Review copies of bulletins. Inspect affected access routes to recreational areas to observe whether the bulletins have been posted.	Timely and detailed bulletins posted in appropriate locations along affected access routes to recreational areas.	Provide notice at least two weeks before project construction near access routes to recreational areas.
Degradation of the recreational experience for riders at Fort Sage OHV Area during construction (Class II)	L-4 Provide notice of construction activities and access restrictions on specific roads or trails in Fort Sage OHV area.	Alternative Segment P (At Fort Sage OHV Area)	BLM CPUC	Review and approve the Construction, Operation, and Maintenance Plan. Visit the Fort Sage OHV Area to observe whether bulletins have been posted in the appropriate locations at the appropriate time.	Timely and detailed bulletins posted in appropriate locations in the Fort Sage OHV Area.	Notification at least one month prior to project construction in Fort Sage OHV Area

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Temporary loss of grazing land use and disturbance to grazing animals during construction (Class II)	L-5 Coordinate with USFS, BLM, and permittees to ensure protection of range improvements and livestock water sources.	Proposed Segments A,C,K,L,O,Q,R,T,W,X,Y Alternative Segments D, J, ESVA,M,P,S,U,V	BLM USFS	Ensure that the BLM, USFS, Applicant, and grazing permittees meet to identify subject range improvements and livestock water sources prior to construction. Review and approve the Construction, Operation, and Maintenance Plan.	Less than 20 percent of grazing allotment permittees contact the Applicant to complain about impacts to grazing during project construction.	Prior to project construction.
Loss of grazing animals through open fences or gates temporarily removed during construction (Class II)	L-6 Construct a temporary barrier across sections of removed fencing so that grazing animals cannot move through the open section of fencing; immediately after completing construction in an area, repair the section of removed fencing.	Wherever route crosses grazing fencing	BLM USFS	Applicant shall designate one member of each construction crew who shall be responsible for ensuring that the barriers are constructed immediately after the fencing sections are removed, and that the sections of removed fencing are repaired immediately after construction is completed. BLM shall periodically inspect the construction area to observe whether barriers have been constructed across sections of removed fencing, and inspect areas here the line has been constructed to observe whether sections of removed fencing have been repaired.	No open sections of fencing are observed during inspections of construction areas.	Designate crew member during project construction on grazing land, immediately after removing sections of grazing allotment fencing; inspect during construction
	L-7 Close all gates immediately after they are opened to allow construction vehicles and equipment access to a construction area.			Applicant shall designate one member of each construction crew who shall be responsible for ensuring that all gates are closed immediately after they are opened. BLM shall periodically inspect the construction area to observe whether all gates are closed.	No open gates are observed during inspections of construction areas.	During project construction on grazing land

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency¹	Monitoring/ Reporting Action	Effectiveness Criteria	Timing
Temporary loss of cropland use during construction (Class II)	L-8a Reimburse farmers along the ROW for crops lost due to Project construction (a stipulation in easement agreements with farmers) L-8b Work with County Cooperative Extension Service (CCES) to develop construction schedule that would avoid prime crop planting, growing, and harvesting seasons.	Proposed Segments A,E,K,O Alternative Segments B,F,G,H,I,W,X	CPUC	Ensure that CCES, Applicant, and farmers meet to develop adjusted construction schedule. Designate responsible party to monitor Applicant compliance with easement stipulation.	A detailed adjusted schedule for construction on cropland. Less than 20 percent of crop farmers contact the Applicant to complain about impacts to cropland during project construction and/or inadequate compensation for lost crops.	Develop schedule before project construction
Degradation of quality of residential uses resulting from permanent change in character of residential environment (Class I)	L-9 Design Proposed Project such that transmission line structures are not placed within 300 feet of existing residences. The separation distance between receptors and the centerline shall be maximized for receptors located less than 300 feet from the centerline.	Proposed Segments L,X Alternative Segment X-East	BLM CPUC	Review and approve the final plans for siting the transmission line structures.	Approved final plans for siting the transmission line structures.	During project final design; prior to permit issuance
Degradation of recreational experience for riders at Fort Sage OHV area (Class II)	L-10 Design Proposed Project to prevent placement of structures within or adjacent to motorcycle or ATV riding trails or roads.	Alternative Segment P (At Fort Sage OHV Area)	BLM CPUC	Review and approve the final plans for siting the transmission line structures.	Approved final plans for siting the transmission line structures.	During project design; prior to permit issuance
Degradation of recreational experience for users of Toiyabe National Forest (Class I)	L-11 Provide Toiyabe National Forest with compensatory land suitable for recreational uses.	Proposed Segment X, X-East, Y	CPUC USFS	Review and approve land acquisitions proposed by SPPCo.	Provision of sufficient recreational lands.	Review proposed acquisition before project construction
Degradation of State Wildlife Areas due to presence of line structures (Class II)	L-12 Provide CDFG with compensatory land contiguous to the Wildlife Areas to compensate for degraded areas.	Proposed Segment Q and Alternative Segment P (Doyle Wildlife Area) Proposed Segment W and Alternative Segment WCFG (Hallelujah Junction Wildlife Area)	BLM CPUC CDFG	Review and approve land acquisitions proposed by SPPCo.	Provision of sufficient contiguous wildlife areas.	Review proposed acquisition before project construction

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Cumulative disturbances during construction of the Proposed Project and other future projects in Modoc and Lassen Counties (Class II)	L-2 through L-4, above	Wherever other projects are constructed within, adjacent to, or near the line ROW or substation sites in Modoc and Lassen Counties	BLM CPUC	Ensure that Applicant, proponents of other projects, and affected agencies meet to coordinate construction activities, utility disruptions, and road closures. Review memorandums regarding results of coordination meetings. Review and approve Construction, Operation, and Maintenance Plan.	Detailed memoranda regarding results of coordination meetings	Before project final design and permitting
	L-13 Coordinate with the proponents of other proposed projects within one mile of the ROW or substation sites to minimize cumulative construction impacts.					
	L-14 Recommend that Counties establish a 300-foot minimum setback for any future occupied structures along the ROW. L-15 If construction of the Proposed Project is delayed, the Applicant shall coordinate with the U.S. Natural Resource Conservation Service (NRCS) so that construction of Proposed Segment X does not overlap construction of the Evans Creek Dam. The Lead Agency shall designate the party responsible for monitoring this measure, who shall ensure that the Applicant and NRCS coordinate construction activities and review memorandums regarding the results of coordination meetings.		Counties	None required since implementation of this mitigation measure is subject to the discretion of the applicable counties.	Incorporation of setback requirements into local ordinances	Prior to development of future projects within proximity of the ROW
Permanent loss of a small portion of the driving range of the Arrowhead Golf Course due to the presence of line structures (Class III)	L-16 Design the Proposed Project such that the transmission line structures are placed outside or on the boundary of the driving range of the Arrowhead Golf Course.	Alternative Segment B (At driving range of Arrowhead Golf Course)	BLM CPUC	Review and approve the final plans for siting the transmission line structures.	Approved final plans for siting the transmission line structures.	Prior to permit issuance
Impeded movement of truck traffic to and from the Wendel Transfer Station (Class III)	T-1, below L-17 Notify the Lassen County Public Works Department of the schedule for constructing Alternative Segment M.	Alternative Segment M (On Wendel Road near the Wendel Transfer Station)	BLM CPUC	Review copy of mailed notice to Lassen County Public Works Department.	Timely and detailed notice.	Notice mailed at least 30 days prior to project construction near the Wendel Transfer Station

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
NOISE						
Impact on sensitive noise receptors (Class II)	N-1 Conduct construction activities between 7 a.m. and 7 p.m. (Monday through Saturday), or for a shorter period if so stipulated in the applicable noise ordinance.	All Proposed and Alternative Segments	BLM CPUC USFS	Applicant/ construction contractor shall include the schedule in all construction plans.	Periodic inspections; no complaints received	Develop schedule prior to construction; monitor complaints
	N-2 Maintain proper mufflers on all internal combustion and vehicles engines used in construction to reduce noise to the maximum feasible extent.		BLM CPUC County Public Works Depts. USFS	Periodic checks of equipment and its operation, or use of noise measurements	Logs of inspections, findings, repairs, and reinspections, showing compliance	Modify equipment prior to construction; inspect during construction
	N-3 Notify by mail sensitive receptors potentially subject to construction noise impact.			Document and review all mailings, calls, and correspondence received. Check against list of expected sensitive receptors.	Periodic check of Applicant's logs, showing effective communication and consideration for the public	Provide 10-day prior notice to receptors to be impacted by construction activities
PUBLIC SAFETY AND HEALTH						
Potential for induced currents and voltages on conducting objects that are not properly grounded and are located near the proposed 345 kV and 230 kV transmission lines (Class II)	P-1 In order to reduce the potential for induced currents and voltages, identify objects that have the potential for induced voltages and work with the affected parties to determine proper grounding procedures. Notify property owners of date line is to be energized, name and phone number of Applicant contact person, and guidelines for future activities within ROW.	All Proposed and Alternative Segments	BLM CPUC	Ensure that Applicant has identified potential current-inducing objects and that proper grounding procedures are formulated.	All objects located within the ROW are properly grounded.	30 days prior to energizing line
Potential for public safety hazards and accidents, such as shock hazard, fuel ignition, and fire hazard (Class II)	P-2 In order to minimize the potential for public safety hazards and accidents, the Applicant will incorporate CPUC General Order 95 and National Electric Safety Code requirements into Project Design and Construction Plans.	All Proposed and Alternative Segments	BLM CPUC	Verify incorporation of CPUC GO95 and NESC requirements into project design and construction plans. Verify compliance with CPUC General Order 95 and NESC requirements.	Ensure that CPUC GO95 and National Electric Safety Code (NESC) requirements are incorporated into project design and construction plans. Confirm compliance with CPUC GO95 and NESC requirements.	Incorporate codes during design process; verify compliance after construction

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
	P-3 In order to minimize the potential for public safety hazards and accidents, prepare a Fire Prevention and Suppression Plan acceptable to the BLM, USFS, and Counties. At a minimum, the Plan should meet the guidelines set forth in the State of California, Department of Forestry, Industrial Operations Fire Prevention Guide and be consistent with the approved Tuscarora Natural Gas Pipeline Project Fire Contingency Plan. In addition, the plan must include procedures for de-energizing the line in the case of fire.	All Proposed and Alternative Segments	BLM CPUC CDF Counties USFS	Ensure preparation of adequate Fire Prevention and Suppression Plan (FPSP). During construction, conduct weekly site inspections to verify compliance with FPSP.	Ensure preparation of, and adherence to, Fire Prevention and Suppression Plan.	Prepare Plan during design & review process (prior to construction); ensure adherence to Plan during construction
	P-4 In order to minimize the potential for public safety hazards and accidents, equipment vehicles, gas-powered equipment and flues with Lead USFS-approved spark arresters.	All Proposed and Alternative Segments	BLM CPUC USFS CDF	Conduct regular site inspection to verify use of USFS-approved spark arresters.	Ensure use of USFS-approved spark arresters.	Equip vehicles prior to construction; monitor during construction and maintenance
	P-5 In order to minimize the potential for public safety hazards and accidents, maintain both a fire watch and fire fighting equipment at locations specified.			Conduct weekly site inspection to verify maintenance of fire watch and availability of fire fighting equipment.	Verification that fire watch is maintained and fire fighting equipment is available.	During construction
	P-6 In order to minimize the potential for public safety hazards and accidents, fire fighting equipment and operators are to be made available for fighting fires in the vicinity of the Project.	All Proposed and Alternative Segments	BLM CPUC USFS CDF	Conduct weekly site inspection to verify maintenance of fire watch and availability of fire fighting equipment.	Verification that fire watch is maintained and fire fighting equipment is available.	During construction
	P-7 In order to minimize the potential for public safety hazards and accidents, during conditions of extreme fire danger when fire restrictions are in effect, limit or suspend construction and maintenance, unless Applicant obtains a hazardous fire condition special use permit.	All Proposed and Alternative Segments	BLM CPUC USFS CDF	Suspend construction and/or maintenance during extreme fire hazard.	Verify compliance with order through periodic site inspections.	During construction and maintenance
Excess generation of waste and/or consumption of energy (Class III)	P-8 To enhance waste minimization and energy conservation, prepare a Waste Minimization and Energy Conservation Plan.	All Proposed and Alternative Segments	BLM CPUC USFS	Review, approve, and monitor Waste Minimization and Energy Conservation Plan.		Prepare Plan prior to construction

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
SOCIOECONOMICS AND PUBLIC SERVICES						
Property values could be adversely affected by the Proposed Project (Class II)	S-1 Avoid proximity to neighboring residential parcels; relocate structures, reduce structure heights, provide screening.	Those locations on Proposed and Alternative Segments subject to a Class I land use or visual impact	BLM CPUC	Review design of project structure locations, heights, and screening	Minimum number of properties incur reduced property value.	During and after construction
Fires could be caused during construction (Class II)	S-2 Fire Prevention and Suppression Plan (see P-3, above) shall include measures addressing safety/training, response strategy, interagency coordination.	All Proposed and Alternative Segments	BLM CPUC Local fire departments USFS	During Project Design Review process, ensure preparation of adequate Fire Prevention and Suppression Plan (FPSP). During construction, conduct weekly site inspections to verify compliance with FPSP.	Ensure preparation of, and adherence to, Fire Prevention and Suppression Plan.	Develop plan during design review process; monitor during construction
TRANSPORTATION AND TRAFFIC						
Increased accident risk for motorists, pedestrians, and bicyclists during construction (Class II)	T-1 Prepare, obtain approval for, and implement detailed Transportation Management Plans.	All Proposed and Alternative Segments	BLM CPUC County Sheriff State Highway Patrol Transportation Agencies	Review and approve Transportation Management Plan	Increased accident rates, risk exposure, or congestion, as determined by affected public agencies.	Prepare and obtain approval for Plan prior to construction; implement during construction
Roadway blockages and traffic congestion during construction (Class II)	T-2 Avoid lane closures or blockages where possible, minimize duration of closures, provide detours, and avoid peak period lane closures.	All Proposed and Alternative Segments	CPUC BLM County Sheriff State Highway Patrol Transportation Agencies	Review and approve Transportation Management Plan, and conformance to all required conditions.	Level of additional congestion, delay, or inconvenience caused by construction activities, as determined by affected public agencies.	Prior to and during construction
Blocked access to properties adjacent to construction zone (Class II)	T-3 Advance notification to property owners and tenants who would have restricted access during construction. Provide alternative access if feasible.	All Proposed and Alternative Segments	CPUC BLM County Sheriff State Highway Patrol Transportation Agencies	Verify notification and coordination efforts with all affected owners and tenants.	If access and parking needs of the adjacent land uses are met.	Provide notice 72 hours prior to construction; provide alternative access during construction
Obstructed pedestrian or bicycle routes and reduced safety during construction (Class II)	T-4 Provide alternative pedestrian/bicycle routes where blockages occur and use appropriate signs/markings.	All Proposed and Alternative Segments	CPUC BLM County Sheriff State Highway Patrol Transportation Agencies	Verify coordination with affected public agencies and preparation of detour signing and plans.	Construction activities do not block or unreasonably impair pedestrian or bicycle movements or safety.	Prior to and during construction

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Restricted access for emergency response units during construction (Class II)	T-5 Advance notification and coordination with emergency service providers. Remain prepared to immediately provide emergency access for any property isolated by construction activities.	All Proposed and Alternative Segments	BLM CPUC County Sheriff State Highway Patrol Transportation Agencies	Verify notifications and coordination with emergency service providers; verify capability to provide immediate access across construction zone.	Construction activities do not preclude access to emergency vehicles.	Provide notice 1 week prior to construction; maintain access during construction
Increased traffic volumes generated by construction activity (Class III)	T-6 Use approved staging areas and shuttle employees to work site in crew trucks or buses. Sufficient off-street parking for contractor and private vehicles shall be provided at staging areas.	All Proposed and Alternative Segments	BLM CPUC Affected Jurisdictions	Verify receipt of approval for staging areas and provision of shuttles to the work zone.	Unacceptable traffic congestion or impacts on public street, as determined by affected jurisdictions.	Develop staging areas and shuttle plans prior to construction; monitor during construction
Increased parking demand for vehicles and equipment during construction and temporary loss of existing parking spaces (Class III)	T-7 Provide off street parking for construction vehicles and equipment. Post advance signs and notify nearby businesses/residents and public agencies if spaces will be displaced. Provide alternative spaces if needed.	All Proposed and Alternative Segments	BLM CPUC Affected Jurisdictions	Verify provision of signage at locations where public parking spaces would be displaced.	No parking hardships are created for nearby residents/businesses.	Coordinate schedules prior to construction
Possible encroachment and safety conflicts with rail operations during construction (Class III)	T-8 Coordinate construction activity with railroads and arrange to have railroad representatives on site while working within active rail ROW.	All Proposed and Alternative Segments where construction is in railroad ROW	BLM CPUC	Verify coordination with railroad companies and demonstrated compliance with railroad and CPUC safety procedures.	Rail operations are maintained without disruption or decreased safety for trains or workers.	Coordinate schedules prior to and during construction
Interference with navigable airspace and decreased safety for aviation activities during construction and operation (Class II)	<p>T-9 Design and construct the structures and wires so that no object will penetrate the navigable airspace around a public or military airport, as defined by the FAA.</p> <p>T-10 Notify the Western-Pacific Region of the FAA if any feature of the project will exceed an obstruction standard or encroach upon navigable airspace, as defined by the FAA. Use high-visibility markings and lighting to improve visibility to pilots, as directed by the FAA.</p> <p>T-11 Position structures at locations that would prohibit wires from extending more than 200 feet above the ground, where feasible.</p>	<p>Proposed Segments C,E,K,O,Q,X</p> <p>Alternative Segment B</p>	BLM CPUC Federal Aviation Administration (FAA).	Verify notification of FAA of temporary or permanent features exceeding obstruction standards or encroaching upon navigable airspace. Notification shall be made on FAA Form 7460-1, "Notice of Proposed Construction or Alteration."	FAA finds that an encroachment is acceptable and that the appropriate markings and lighting features are installed to the satisfaction of FAA.	Finalize design prior to permit issuance. Lighting and markings to be installed during construction & maintained for the life of the project.

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency ¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
An accident or structural failure could potentially result in blockages of highways and/or rail facilities (Class I)	T-12 Prepare an Emergency Response Plan which addresses disruptions to the transportation system in case of a major accident or failure. Maintain constant readiness to implement plan if necessary.	All Proposed and Alternative Segments	BLM CPUC Local law enforcement agencies CHP, NHP Caltrans, NDOT, local public works depts., and fire depts.	Review plan; verify preparedness on an annual basis.	Plan is deemed acceptable and would be effective in the event of an accident.	Plan shall be prepared prior to operation, then updated and tested annually for the life of the project.
Cumulative impact of simultaneous construction projects (Class II)	T-13 Maintain coordination with agencies responsible for encroachment permits on each affected roadway and with utility companies.	All Proposed and Alternative Segments	BLM CPUC Affected local jurisdictions	Responsible agencies coordinate regarding timing of project construction and road closures	Roadway closures have minimal effect on local or regional transportation systems	Coordinate schedules before and during construction
VISUAL RESOURCES						
Short-term visual impact due to construction activities (Class III)	V-1 In order to reduce the short-term visual impact due to construction activities, store construction materials and excavated materials away from highly visible route segments along US 395 and State Route 299.	All Proposed and Alternative Segments	BLM CPUC Local jurisdictions	Lead Agency-approved Monitor conducts weekly site inspections during Project Construction to confirm adherence to contract specifications regarding storage of construction materials.	Ensure that construction materials and excavated soils are minimally visible from adjacent travel corridors.	During project construction
	V-2 In order to reduce the short-term visual impact due to construction activities, confine construction activities and materials storage to within substation sites, staging areas, designated access roads, and specified areas within the transmission line ROW and require full cleanup of all construction sites, ROW, and adjacent lands.	All Proposed and Alternative Segments	BLM CPUC Local jurisdictions USFS	Lead Agency-approved Monitor conducts weekly site inspections during Project construction to confirm adherence to contract specifications regarding confinement of construction activities and storage of construction materials.	Ensure that construction activities and material storage are confined within substation sites, staging areas and ROW.	During and after project construction
	V-3 In order to reduce the short-term visual impact due to construction activities, prohibit the construction of access or spur roads for transmission line construction in highly scenic areas or areas of known public concern, if such activities result in strong levels of visual contrast.	All Proposed and Alternative Segments	BLM CPUC USFS Local jurisdictions	BLM and USFS identify prohibited areas and incorporate into Construction Operation & Maintenance Plan approval process prior to construction. Compliance to be monitored weekly by a Lead Agency-approved monitor.	Ensure that access or spur roads do not encroach upon designated prohibited areas.	Prohibited area identification prior to permit issuance; avoidance of prohibited areas during construction

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
	V-4 In order to reduce the short-term visual impact due to construction activities, whenever possible, construct access or spur roads at appropriate angles from the originating, primary travel facilities to minimize extended, in-line views of newly graded terrain.	All Proposed and Alternative Segments	BLM CPUC USFS Local jurisdictions	BLM and USFS to review design of access and spur roads for appropriate alignments during Construction Operation & Maintenance Plan review and approval process, prior to construction. Compliance with construction plan specifications to be monitored weekly by Lead Agency-approved monitor.	Ensure that views of newly graded terrain are minimally visible from primary and/or adjacent travel corridors.	Design review prior to permit issuance; monitoring during construction
Excessive visual access to Alturas Substation and transmission line structures resulting from the clearing of juniper adjacent to Crowder Flat Road as part of access road construction (Class II)	V-2 and V-4, above V-5 In order to minimize the visual access to the Alturas Substation site, limit structure heights to 70 feet between Milepost MP-1 and Angle Point HSØ1 and maintain a sufficient density of juniper between the proposed substation site and Crowder Flat Road immediately west of the substation site.	Milepost MP-1 to Angle Point HSØ1 and proposed Alturas Substation (Crowder Flat Road, immediately adjacent to Proposed Segment A)	BLM CPUC USFS	Review and approve structure design for 70-foot height limitation prior to permit issuance. Monitor adherence to the approved structure design. Determine juniper density requirements and incorporate into project construction plans prior to site preparation. Monitor compliance weekly during site preparation and construction.	Ensure that structures are limited to 70-foot maximum height between milepost MP-1 and Angle Point HSØ1. Ensure that visual access to Alturas Substation and Proposed Segment A are minimally visible from that portion of Crowder Flat Road immediately adjacent to the substation.	Tower design review prior to permit issuance; monitoring during construction. Juniper density requirements determined prior to construction; monitoring during construction
Excessive visual access to Alturas Substation as viewed along substation access road from Crowder Flat Road (Class II)	V-6 Construct the Alturas Substation access road with appropriate angles and curves to prevent a direct line of sight to the substation from the intersection with Crowder Flat Road. No juniper shall be removed adjacent to Crowder Flat Road.	Proposed Alturas Substation site	BLM CPUC USFS	Review access road design, including appropriate angles and curves, prior to permit issuance. Monitor adherence to the approved plans weekly.	Ensure that direct line-of-sight views to Alturas Substation are not available to motorists on Crowder Flat Road.	Design review prior to permit issuance; monitoring during construction
Potential to view light and glare from night-time illumination of Alturas Substation, Border Town Substation, and the Alternative Alturas Substation (Class II)	V-7 Ensure that all lighting structures for night-time illumination of the substation are fitted with appropriate lamp shields to minimize light scatter and glare outside the substation sites.	Proposed and Alternative Substation sites	BLM CPUC OSHA	Review and approve lamp shield design as part of the construction plan submittal process. Monitor adherence to the approved lamp shield design will be determined.	Ensure that excessive light and glare are not visible to motorists on Crowder Flat Road (Alturas Substation); the Upper Long Valley access roads (Border Town Substation); or motorists on State Route 299, Mill Street and Fourth Street, or nearby residents (Alternative Alturas Substation).	Design review prior to construction; Night-time inspection following Substation construction completion

PART F. MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

Impact	Mitigation Measures	Location (Segment)	Responsible Agency¹	Monitoring/Reporting Action	Effectiveness Criteria	Timing
Structure skylining would occur for that portion of Proposed Segment A crossing the upper end of Daggert Canyon and the plateau in the vicinity of Angle Points ANPØ2-AØ3 ⁺ (Class III)	V-8 Reduce structure heights to the maximum extent feasible to lessen the skylining effect created by the transmission line structures as the route crosses upper Daggert Canyon and the plateau south of Angle Point AØ3 ⁺ .	Proposed Segment ANPØ2-AØ3 ⁺	BLM CPUC USFS	Review and approve structure designs prior to permit issuance. Monitor adherence to the approved structure design.	Ensure that skylining of Proposed Segment ANPØ2-AØ3 ⁺ is minimized as viewed from Crowder Flat Road, State Route 299, and North Alturas.	Design review prior to permit issuance
Proposed Route Segment O would encroach into Skedaddle Wilderness Study Area and be inconsistent with WSA applicable BLM VRM Class I management objectives (Class II)	V-9 Relocate Angle Point Ø1 further south in order to avoid encroachment into the Skedaddle WSA.	Route Segment O in the vicinity of Angle Point ØØ1	BLM CPUC	During the EIR/S and project review and approval process, approve an acceptable relocation of Angle Point ØØ1	Ensure that Proposed Segment O does not encroach into the Skedaddle WSA.	During project review and approval process
Long-term visual impact due to presence of Border Town Substation (Class I)	V-10 Prepare and implement a Landscaping Plan for the Border Town Substation.	Border Town Substation	BLM CPUC	Review and approve Landscaping Plan. Monitor adherence to Plan requirements.	Renderings of expected results shall be provided for each sensitive viewshed.	Final Landscaping Plan to be approved prior to substation construction

¹ **Agency Acronyms**

BLM Bureau of Land Management
 CPUC California Public Utilities Commission
 APCD Air Pollution Control District
 CCES County Cooperative Extension Service
 CDFG California Department of Fish and Game
 CDF California Department of Forestry
 CDWR California Department of Water Resources
 CDMG California Division of Mines and Geology
 CHP California Highway Patrol
 FAA Federal Aviation Administration

FEMA Federal Emergency Management Administration
 OSHA Occupational Safety and Health Administration
 NBMG Nevada Bureau of Mines and Geology
 NHP Nevada Highway Patrol
 NDOT Nevada Department of Transportation
 SHPO State Historic Preservation Officer
 RWQCB Regional Water Quality Control Board
 USACE U.S. Army Corps of Engineers
 USFWS U.S. Fish and Wildlife Service
 USFS U.S. Forest Service (Modoc and/or Toiyabe National Forest implied, depending on location of impact)

+ Indicates a starting or ending point beyond the referenced Angle Point.